Claim 23. (Amended) A method of identifying one or more compounds that modulate the function of C-RET receptor protein kinase, the method comprising [the following steps]:

(a) expressing [said] a C-RET receptor protein in cells;

(b) contacting said cells with one or more compounds, wherein each said compound is selected from the group consisting of a peptide of less than 20 amino acids, a non-peptide organic molecule and an antibody; and

(c) [monitoring an effect on] comparing a phenotype of said cells to a phenotype of cells not expressing said C-RET receptor protein or to a phenotype of cells expressing said C-RET receptor protein but not contacted with said compound(s), wherein a difference in said phenotypes identifies said compound(s) as modulators of C-RET function.

B1

Claim 24. (Amended) The method of claim 23, wherein said [effect is a change or an absence of a change in cell] phenotype is selected from the group consisting of cell size, cell shape, cell proliferation, cell differentiation, cell survival, cell death and the utilization of a metabolic nutrient.

Claim 25. (Amended) The method of claim 23, wherein said [effect is a change or an absence of a change in] phenotype is a protein kinase catalytic activity of said C-RET receptor protein.

Claim 26. (Amended) The method of claim 23, wherein said [effect is a change or an absence of a change in the] phenotype is an interaction between said C-RET receptor protein and a natural binding partner of C-RET.

Please add the following new claims:

Claim 27. (New) The method of claim 25, wherein said protein kinase catalytic activity is measured by determining the rate or amount of phosphorylated product production by said C-RET receptor protein.

B2

Claim 28. (New) The method of claim 26, wherein said natural binding partner is selected from the group consisting of a protein comprising an SH2 domain, a protein comprising an SH3 domain, a guanine nucleotide exchange factor, a protein phosphatase and a protein kinase.

Claim 29. (New) The method of claim 23, wherein said C-RET receptor protein is an exogenous C-RET receptor protein.

REMARKS

SUMMARY

Claims 23-26 are examined in the Office Action, claims 6-8, 10, 16-18, and 20-22 having been withdrawn from consideration by the Examiner. Applicant has amended claims 23-26, and added new claims 27-29 herein. The new and amended claims are fully supported by the specification, and do not introduce new matter or require a new search.

For example, on page 12, lines 18-27, the specification states that test compounds of the instant invention can include antibodies, peptides of less than 20 amino acids, and non-peptide organic molecules. Additionally, Example 4, beginning on page 40, describes comparing the phenotype of cells expressing a C-RET receptor protein to that of cells not expressing the exogenous receptor, while Example 5, beginning on page 42, describes comparing cells expressing a C-RET receptor protein and contacted with a test compound to that of cells not contacted with a test compound.

Moreover, on page 13, line 10, through page 14, line 26, and page 23, lines 7-17, the specification describes representative examples of phenotypes that may be observed, including, for example, cell size, cell shape, cell proliferation, cell differentiation, cell survival, cell death, the utilization of a metabolic nutrient, and a catalytic activity such as a protein tyrosine kinase catalytic activity.

Notwithstanding the foregoing, Applicant expressly reserves the right to pursue subject matter no longer or not yet claimed in one or more applications that may claim